

# Curriculum Vitae

**Kuan-Fu Feng** 馮冠芙

## Postdoctoral scholar

Earth and Space Sciences, University of Washington

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## Research Interest

Spatiotemporal seismic velocity changes | Seismic noise interferometry | Volcano seismology

## Research experience

- 2023/06 – Postdoctoral scholar, Earth and Space Sciences, University of Washington, US
- 2022/06 – 2023/05 Postdoctoral scholar, Geology and Geophysics, University of Utah, US
- 2022/01 – 2022/05 Postdoctoral scholar, Institute of Earth Sciences, Academia Sinica, Taiwan
- 2016/10 – 2017/08 Research assistant, Institute of Earth Sciences, Academia Sinica, Taiwan
- 2014/02 – 2014/06 Research assistant, National Chung Cheng University, Taiwan

## Education

- 2017/09 – 2022/01 **Ph.D.**, Geosciences, National Taiwan University, Taiwan  
Supervisor: Dr. Hsin-Hua Huang and Dr. Yih-Min Wu
- 2014/09 – 2016/06 **M.S.**, Geosciences, National Taiwan University, Taiwan  
Supervisor: Dr. Yih-Min Wu
- 2010/09 – 2014/01 **B.S.**, Earth and Environment Sciences, National Chung Cheng University, Taiwan

## Journal article

- Feng, K.-F.\***, H.-H. Huang\*, Ya-Ju Hsu and Y.-M. Wu (2021), Controls on seasonal variations of crustal seismic velocity in Taiwan using single-station cross-component analysis of ambient noise interferometry, *J. Geophys. Res., Solid Earth*, e2021JB022650. <https://doi.org/10.1029/2021JB022650>.
- Hsu, Y.-F., H.-H. Huang\*, M.-H. Huang, V. C. Tsai, R. Y. Chuang, **K.-F. Feng** and S.-H. Lin (2020), Evidence for Fluid Migration During the 2016 Meinong Taiwan Aftershock Sequence, *J. Geophys. Res., Solid Earth*, 125(9), e2020JB019994. <https://doi.org/10.1029/2020JB019994>.
- Feng, K.-F.**, H.-H. Huang\* and Y.-M. Wu (2020), Detecting pre-eruptive magmatic processes of the 2018 eruption at Kilauea, Hawaii volcano with ambient noise interferometry. *Earth, Planets and Space*, 72:74. <https://doi.org/10.1186/s40623-020-01199-x>
- Lee, S.-J.\*, T.-C. Lin, **K.-F. Feng**, and T.-I. Liu (2018), Composite megathrust rupture from deep interplate to trench of the 2016 Solomon Islands earthquake. *Geophysical Research Letters*, 45(2), 674-681. <https://doi.org/10.1002/2017GL076347>
- Brown, D.\*, Y.-M. Wu, **K.-F. Feng**, W.-A. Chao, and H.-H. Huang (2015), Imaging high-pressure rock

## Selected Conference Presentation

### 2023 GAGE/SAGE 2023 Community Science Workshop, Pasadena, California

*Investigating seismic velocity response to near-surface hydrological variations in Utah, United States. Abstract no. 100 (Poster)*

### 2022 American Geophysical Union (AGU) Fall Meeting, Chicago

*Investigating near-surface hydrological responses on crustal seismic velocity variations in subtropical and semi-arid regions. Abstract S15D-0230 (Poster)*

### 2022 The 5th Taiwan Earthquake Center (TEC) Annual Meeting, Taiwan

*A Noise-Based Monitoring System of Crustal Seismic Velocity Changes in Taiwan. (Oral)*

### 2021 American Geophysical Union (AGU) Fall Meeting, ONLINE

*Assessment of controlling factors on seasonal variations of crustal seismic velocity in Taiwan using ambient noise single-station cross-component analysis. (Poster)*

### 2021 Geological and Geophysical Annual Meeting, Taiwan

*1) Revealing seasonal crustal seismic velocity variations in Taiwan with single-station cross-component analysis. Abstract S3-O-01. Session: S3 (Oral)*

*2) Co-seismic variations in crustal seismic velocity related to M6+ earthquakes in Taiwan. Abstract S3-PC-006 (Poster)*

### 2021 European Geosciences Union (EGU) Annual Meeting, ONLINE

*Revealing seasonal crustal seismic velocity variations in Taiwan with single-station cross-component analysis. Abstract: EGU2021-7010. Session: SM3.1 (Oral)*

### 2020 Geological and Geophysical Annual Meeting, Taiwan

*Single-station cross-component analysis of ambient noise reveals seasonal crustal seismic velocity variations in Taiwan. Abstract S3-O-02. Session: S3 (Oral)*

### 2019 American Geophysical Union (AGU) Fall Meeting, California

*Detection of a precursory phase of the 2018 magma eruption in the Lower East Rift Zone of Kilauea volcano, Hawaii. Abstract: 508923. Session: V43B-03 (Oral)*

### 2019 Workshop on “Frontiers in Seismic Interferometry”, Taiwan

*Detecting pre-eruptive magmatic process of the 2018 eruption in the Lower East Rift Zone of Kilauea, Hawaii volcano with seismic noise interferometry (Oral)*

### 2019 European Geosciences Union (EGU) Annual Meeting, Vienna

*Detection of a precursory phase of the 2018 magma eruption in the Lower East Rift Zone of Kilauea volcano, Hawaii. Abstract: EGU2019-3322 (Poster)*

### 2018 The 15th Asia Oceania Geosciences Society (AOGS) Meeting, Hawaii

*Near real-time monitoring system of the seismic velocity changes in Taiwan. Abstract SE03-A023 (Poster)*

### 2017 American Geophysical Union (AGU) Fall Meeting, New Orleans

*Seismogenic structure in Chiayi area, Taiwan: Insight from the 2017  $M_L$  5.1 Zhongpu earthquake*

## Thesis and Dissertation

**Feng, K.-F. (2022)** Noise-based monitoring on crustal seismic velocity variations. *PhD Dissertation, National Taiwan University*. (Supervisor: Dr. Hsin-Hua Huang and Dr. Yih-Min Wu)

**Feng, K.-F. (2016)** Investigating the uncertainty of time-dependent seismic velocity changes using travel time tomography: a case study of the  $M_L$  6.4 2013 Rueisuei earthquake, Taiwan. *Master Thesis, National Taiwan University*. (Supervisor: Dr. Yih-Min Wu)

## Honor and Award

- 2022** Dean's Award, College of Science, National Taiwan University
- 2022** Postdoctoral Research Abroad Fellowship, Ministry of Science and Technology, Taiwan
- 2021** Prof. Yi-Ben Tsai Graduate Student Scholarship, Chinese Taipei Geophysics Society (CGS)
- 2019** Outstanding Student Paper Awards in International Conferences, Earth Science Research Promotion Center (ESRPC)
- 2019** Invited talk at Workshop on Frontiers in Seismic Interferometry
- 2013** Excellent Student Scholarship, Chinese Taipei Geophysical Society
- 2012** Outstanding Student Scholarship, National Chung Cheng University
- 2011** Outstanding Student Scholarship, National Chung Cheng University
- 2010** Outstanding Student Entrance Scholarship, National Chung Cheng University

## External professional service

Peer reviewer for *Journal Geophysical Research* (4)

Peer reviewer for *Nature Communications* (1)

President of Graduate Student Association, Geosciences, National Taiwan University, in 2018

## Teaching experience

Teaching assistant in the following graduate-level courses:

- National Taiwan University *Geo5073: Time Series Analysis*
- National Taiwan University *Geo5101: Computer Programming on Geosciences*

Teaching assistant in the following undergraduate-level courses:

- National Taiwan University *Geo2006: Geophysics*